AMENDMENTS TO THE CLAIMS

9. (previously presented) An integrated sensor apparatus comprising:

a housing;

a sensor module within the housing, the sensor module including a plurality of sensor packages coupled to a substrate having slots for receiving the sensor packages, each sensor package having an axis of sensitivity positioned in a different spatial direction; and

a control circuit coupled to the housing for controlling the sensor module.

10. (previously presented) The apparatus of claim 9, wherein the sensor module comprises at least one micro-machined accelerometer.

11. (previously presented) The apparatus of claim 9, wherein the sensor module comprises three micro-machined accelerometers positioned such that the axes of sensitivity are substantially orthogonal to each other.

12. (previously presented) The apparatus of claim 9, wherein the control circuit is an application specific integrated circuit.

13. (previously presented) The apparatus of claim 9, wherein the sensor module is a monolithic package selected from a group consisting of i) a hollow frame; ii) a box; iii) a three-dimensional circuit board; iv) a cylinder; and v) a cube.

14. (previously presented) The apparatus of claim 9 wherein the sensor packages include a sensor coupled to the sensor package.

15. (previously presented) The sensor module of claim 9, wherein the housing includes:

a cavity for receiving a sensor;

one or more parallel planar surfaces;

a bottom surface of the cavity;

a bottom exterior surface;

a top exterior surface; and

one or more side surfaces.

16. (previously presented) The sensor module of claim 15 wherein the housing includes:

one or more bond pads on one or more of the parallel planar surfaces;

one or more bond pads on the bottom exterior surface;

one or more bond pads on the top exterior surface; and

one or more bond pads on one or more of the side surfaces.

17. (previously presented) The sensor module of claim 15, wherein the housing cavity further includes one or more resilient couplings for resiliently coupling the sensor to the package, and wherein the cross sectional shape of the resilient couplings is selected from a group consisting of i) approximately rectangular, and ii) approximately circular.

18. (previously presented) The sensor module of claim 17, wherein the resilient couplings further include one or more bumpers for slidingly supporting the sensor.

19. (previously presented) The sensor module of claim 17, wherein the housing cavity includes a bottom surface, and wherein the resilient couplings are coupled to the bottom surface of the cavity.

20. (previously presented) The sensor module of claim 19 wherein the resilient couplings are approximately positioned at one or more ends of the bottom surface of the cavity of the housing.

21. (previously presented) The sensor module of claim 19, wherein the resilient couplings are approximately positioned at the approximate center of the bottom surface of

the cavity of the housing.

22. (previously presented) The sensor module of claim 17, wherein the housing cavity includes a bottom surface, and wherein the bottom surface of the cavity further includes a recess in the bottom surface of the cavity for receiving the resilient couplings.

23. (previously presented) The sensor module of claim 22, wherein the resilient couplings are approximately positioned at the approximate center of the recess of the bottom surface of the cavity.

24. (previously presented) The sensor module of claim 15, wherein the cavity of the housing further includes a bottom surface, wherein one or more bumpers are coupled to the bottom surface of the cavity for slidlingly supporting the sensor in the housing.

25. (previously presented) The sensor module of claim 24, wherein the bumpers include a cross-sectional shape selected from a group consisting of i) approximately square, approximately rectangular, ii) approximately circular, and iii) approximately triangular.

26. (previously presented) The sensor module of claim 15 wherein the sensor includes one or more bond pads for coupling the sensor to the housing.

27. (previously presented) The sensor module of claim 26, wherein the bond pads cross sectional shape is selected from a group consisting of i) approximately rectangular, ii) approximately circular, iii) approximately oval, iv) approximately tri-oval, v) approximately oct-oval, vi) approximately wavy sided rectangular, vii) approximately oct-pie-wedge, viii) approximately hollow oct-pie-wedge, ix) approximately nine circular, x) approximately starburst, and xi) approximately sunburst.

28. (previously presented) The sensor module of claim 15, wherein the sensor further includes one or more passive regions at one or more ends of the sensor, wherein the sensor further includes one or more bond pads, and wherein the bond pads may be located at one or more ends in the passive regions.

29. (previously presented) The sensor module of claim 15, wherein the sensor further includes one or more active regions, wherein the sensor further includes one or more bond pads, and wherein the bond pads may be located in the approximate center of the active regions.

30. (previously presented) The sensor module of claim 15, wherein the housing further includes one or more wire bonds;

wherein the sensor further includes one or more parallel planar surfaces;

wherein the housing further includes one or more parallel planar surfaces; and

wherein the wire bonds electrically couple the parallel planar surfaces of the sensor to the parallel planar surfaces of the housing.

31. (previously presented) The sensor module of claim 12, wherein the sensor further includes a mounting member for removably coupling the sensor to the housing.

32. (previously presented) The sensor module of claim 31, wherein the mounting member is a shorting clip.

33. (previously presented) The sensor module of claim 31, further including a spring assembly for removably coupling the mounting member to the housing.

34. (previously presented) The sensor module of claim 9, wherein the control circuit comprises;

a controller;

an adhesive for coupling the controller to the housing;

one or more wire bonds for coupling the controller to the housing; and

an encapsulant for encapsulating the controller and wire bonds.

35. (previously presented) The sensor module of claim 34, wherein the controller is placed on one of i) the top exterior surface of the housing, and ii) a bottom exterior surface of the housing.

36. (currently amended) A method of packaging a sensor assembly comprising:

providing a housing;

disposing a sensor module within the housing wherein the sensor module includes a plurality of sensor packages coupled to a substrate having slots for receiving the sensor packages, each sensor package having an axis of sensitivity in a different special direction;

disposing a controller on the housing; and

coupling the controller to the sensor module with an electrical coupling, wherein the controller is subsequently used to control the sensor module.

37. (previously presented) The method of claim 36, wherein disposing the controller further comprises:

dispensing an adhesive on the housing;

placing the controller onto the adhesive;

curing the adhesive;

wire-bonding the controller to the housing;

encapsulating the controller and the wire bonds with an encapsulant; and

curing the encapsulant.

38. (previously presented) The method of claim 36, wherein the sensor module includes a micro-machined accelerometer.

39. (previously presented) The method of claim 36, wherein the controller includes a plurality of controller bond pads and the housing includes a plurality of bond pads;

wherein wire-bonding the controller to the housing comprises;

soldering a plurality of wires to corresponding controller bond pads; and

soldering a corresponding end of the wires to corresponding housing bond pads.

40. (previously presented) The method of claim 36, wherein the housing includes:

a cavity;

one or more planar surfaces; a top surface;

a bottom surface; and

one or more housing bond pads on the planar surfaces;

wherein the cavity is for receiving the sensor module;

wherein the planar surfaces are for coupling the sensor module, and the controller to the housing; and

wherein the housing bond pads are for coupling the planar surfaces to the controller.

41. (previously presented) The method of claim 40, wherein the housing cavity further includes

one or more resilient couplings for resiliently coupling the sensor to the cavity.

42. (previously presented) The method of claim 41, wherein coupling the sensor module to the housing comprises;

placing a spring assembly in the housing cavity;

coupling a mounting member to the sensor module;

placing the sensor module within the housing cavity; and

coupling the mounting member to the spring assembly.

43. (previously presented) The method of claim 42, wherein the mounting member is a shorting clip.

44. (previously presented) The method of claim 36, wherein the different spatial directions are orthogonal to each other.

45. (previously presented) The method of claim 36, wherein the sensor packages are coupled to each other.